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ABSTRACT

Establishing that cultural diversity may be nothing more than ecological adjustment and then examining the literature and research related to culturally pluralistic education, the author deals with Mexican American children and children from other minority groups in terms of growth and development (physical, mental, academic, and sociocultural); language acquisition and learning (theoretical linguistics, the nature of language, language acquisition, language description, semantics, syntax, phonology, contrastive linguistics, psycholinguistics, language and cognition, sociolinguistics, multilingual societies, multilingual individuals); bilingual programs and methodology; and tests and measurements. The author recommends 3 areas for basic research: (1) life-style studies, (2) sociopsychological studies, and (3) educational studies. In addition, it is suggested that a new start for the education of multicultural children utilize an organizational systems approach. One figure and a 74-item bibliography are included. (MJB)

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THE EFFECTS AND IMPLICATIONS OF CULTURALLY PLURALISTIC EDUCATION ON THE MEXICAN-AMERICAN

By

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for

Southwestern Cooperative Educational Laboratory
Albuquerque, New Mexico

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THE EFFECTS AND IMPLICATIONS OF CULTURALLY PLURALISTIC EDUCATION ON THE MEXICAN-AMERICAN

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Definition of Problem

The term culturally pluralistic is an evasive concept. When the way of life of different societies are viewed from a general and broad perspective, there seem to be genuine and basic cultural differences between groups of people. Thus on a gross simplification basis one can talk about the Mexican-American culture, the Pueblo Indian culture, the Navajo culture, and the Anglo-American ? ?. At the point that we attempt to generalize in our minds the totality of the Anglo-American way of life, we realize the tremendous variance within the group which makes it an impossibility to generalize a concept such as the Anglo-American culture. Yet the Mexican finds no difficulty in stereotyping the "Gringo," the Columbian, "el Norte Americano,"and the Equadorean, "el Meestér." Therefore, using the same over-simplification, I am afraid that as middle class teachers and educators we categorically tend to stereotype a group of people and teach, or teach about, the "Indian" culture, the "Mexican-American" culture, etc.

Further analysis into the definition of culture as being the way of life of a group of people demands that we hold the type of economic base constant when we compare or teach about different cultures. Here we start finding an array of similarities between groups of people of which we were not aware before. We find, for example, that there are so many similarities between the native Congolese and the Aucas of the Amazon that, were it not for geographic distance (and skin color), they could be considered one group.

Similarly one is hard put to find significant differences between the French-Canadian farmer and the farmers of northern New Mexico of Spanish descent. It is hard to find significant differences between the life styles of a typical West German and a typical American when both belong to the middle class.

The differences between cultural groups become less significant when one holds constant the resulting class stratification of a given economic base. Thus, for example, it is very difficult to find any real differences between the landed gentry in the ante-bellum South and the <u>hacendado</u> of of Ecuador. The differences in life styles between the Black slave in the pre-Civil War South and the Indian Huasipungero (serf) of Ecuador are almost non-existent except for accidentals such as physical characteristics (one was Black; the other is Indian), and language background. Kluckhohn found minimal differences in personalities between Americans (democratic society) and Russians (communistic society) when occupations were paired and age was held constant.

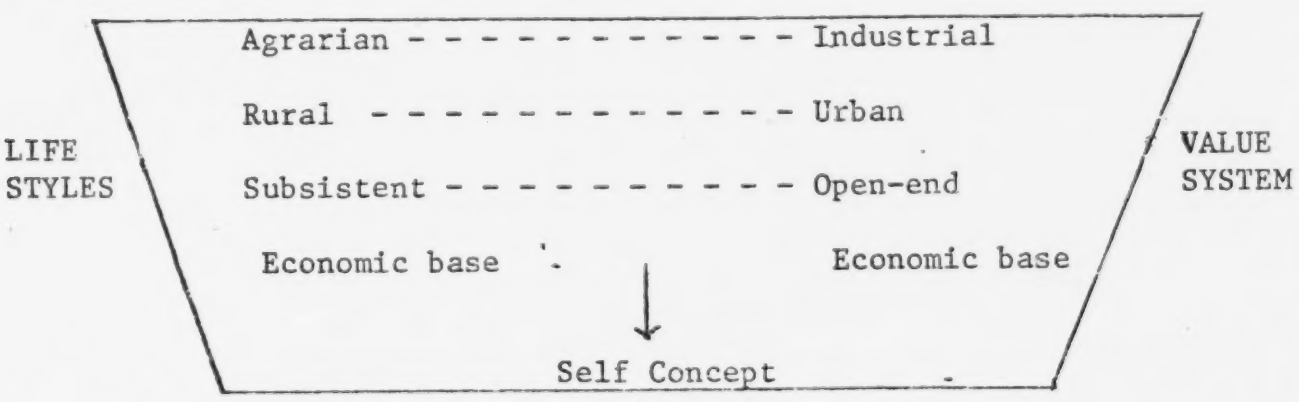
There are some historical factors that tend to cling to the "culture" of a group of people even after their usefulness has dissipated. These factors are kept alive (at least for some time) by way of traditions and religion. For example, the situational leadership approach of the Mescalero Apaches was useful to them when their way of life consisted mostly in raiding. However, as they have settled into ranching, lumbering, etc., these qualities have become anachronistic in their life. Given enough time, out of utilitarian existence, however, these elements disappear from a "culture."

Many other examples can be given to illustrate the fact that the <u>specifics</u> of a behavior pattern may differ from group to group but the interpretation

in terms of the role system, value system, and ethos of a group of people are strikingly similar. So similar are they, in fact, that for the purposes of education, I believe they can be ignored.

What differences there are can be explained in terms of adjustment rather than differences of culture. A historical review of the cultures of the world indicates that groups of men chronologically have moved from the tree, to the cave, to hunting, to agriculture, and finally to industry. Thus one can pretty well pinpoint the development of a culture in terms of economic development. By holding the time element constant one can see the overwhelming similarities in the way of life of groups of people at a given point in time. Thus "cultural differences" can be explained as ecological adjustments of groups of people in several continuums. Figure I depicts this concept of adjustment for modern times.

Figure I


Agrarian - - - - - - - - - - - - Industrial
Rural - - - - - - - - - - - - - - Urban
LIFE STYLES
Subsistent - - - - - - - - - - - - Open-end
VALUE SYSTEM
Economic base
Economic base
Self Concept

The reason why I dwell at length on this issue is because what we may now be terming "cultural diversity" may be nothing more than ecological adjustment. It seems very probable that "cultural differences" become insignificant for the purposes of the job of education when one holds constant

the type of economic base and the resulting class stratification. If this is the case and, at least logically, it seems so, we are giving great importance to a straw man who has relatively little viability. Thus we direct our efforts toward developing teaching approaches toward "culturally different" children when the cultural differences are merely differences in the levels of adjustment along the continuums described above.

The task of developing teaching approaches, materials, and curricula that will suit the different cultural groups in the Southwest become insurmountable when one considers the multitude of groups present. We have, in New Mexico alone, the Spanish-American of northern New Mexico, the Mexican-American, 19 Indian Pueblos (all of which have unique features to their culture), two Apache tribes, Anglo-Americans in all social classes, and a host of other minority groups. It would be an impossibility to generalize the data and materials, the motivational structures and teaching techniques from one group to another without making one of the other suffer. We have argued that lower class children, "culturally" different children, and language different children suffer in our present curricula because of the middle class bias of the school. If we hold steadfast to the cultural differences because of logistic constraints, children who do not fit into the cultural group for whom a specific curriculum was developed will suffer in the same manner as children who are not middle class WASP suffer now.

It behooves us, then, to broaden the base for research and curriculum development. We must find the true areas of commonness without losing the base of differences. For example, we know that Pueblo children, Mexican-American children and lower class Anglo-American children have about the same narrowness of time orientation. However, the reasons for the narrowness

of time orientation for all three types are not the same. To develop the same motivational structures for all three and to attempt to broaden their time orientation in the same manner may be a mistake. The Indian and Mexican-American children's culture who come from a rural, agrarian environment, developed this narrowness of time orientation because of the cyclic tempo of life on the farm; e.g., in the spring one planted, in the summer one cultivated, in the fall one harvested, etc. There was no possible way of hurrying the job because the work always came in due time. The lower-lower class child's life styles, on the other hand, has a narrowness of time orientation because of the lack of earning power of the family, and the temporary type of employment available to the family due to lack of saleable skills. The fear of want activates the present time orientation of lower-lower class urban families, regardless of "cultural" background.

The same type of differentiations probably should be made regarding levels of aspiration, attitude towards work, view of natural phenomena, concept about mastery of one's potential, and the totality of self concept.

There is a strong possibility that a "culturally pluralistic" approach to education may be built entirely on false premises. Generally, one views multicultural education as doing the following:

1. Providing <u>adequate</u> motivational structures for "culturally" different children.
2. Using teaching techniques applicable to "culturally" different children.
3. Providing learning experiences (curriculum) that are within the life styles of the "culturally" different children.
4. Providing an educational program that enhances a positive self concept.

5. Using curriculum content of the "cultural" heritage of the "culturally" different children.
6. Using the newest approaches to second languages teaching.
7. Utilizing the language of the "culturally" different children as a medium of instruction.

With little analysis, one can easily detect the sandy base upon which we have built our castles. For example, the motivational structures applicable to the Indian children will vary according to (1) whether they live in the pueblo or not, (2) the amount of education of the parents, (3) the type of work that the parents do, (4) the amount of the native language used at home, (5) the depth of values that the parents have placed on their children's education, and (6) the type of peer group with whom the individual associates. Here we are talking about social class differences and not about cultural differences. It would seem that to tackle the problem from a "cultural-difference" base is to build a case on false premises and assumptions. The differences within the Pueblo Indian group or the Mexican-American group or any other "cultural" group is greater than the differences between the group when one holds constant the type of economic base (agrarian or industrial) and the environmental background (rural or urban) along with the resulting class stratification.

What has been said about motivation can likewise apply to teaching techniques, to type of learning experiences, and to the development of self concept. These factors should be the core essence of the educational program. There may be a difference in teaching about a "cultural" heritage. Here there may possibly be a question of identification. However, unless strong emotive attempts have been made to force the children to identify

with certain groups, the children choose to identify with their social class group. For example, in watching TV Indian children seldom identify with the warriors on the screen. Instead they empathize with outnumbered soldiers and cheer when the Indians are driven away. Similarly, middle class Mexican-American children do not identify with the bracero or migrant types.

The above discussion hopefully may give new directions to needed research in education so as to enhance better opportunities not only for the Mexican-American, Indian, or other "culturally" and linguistically different children, but also for all non-middle class children. In the meantime, however, we have to focus on the research in education where culture was defined as an integrated entity which had few or no intrinsic bonds with another way of life.

Research Related To Culturally Pluralistic Education

The research in the area of multicultural education that can be applied to the Southwest is basically non-existent. Whatever research exists is mostly of the survey type. Little research of an experimental type was found that has had much impetus on multicultural education.

Most of the research reported in this paper is relatively unrelated to culturally pluralistic education because it was done outside the premises of this type of education with a different set of hypotheses and variables in mind. In fact, multi cultural education as a concept has had little acceptance and virtually no application. Even where bilingual programs have been implemented the educators in these programs emphasize overwhelmingly "bilingualism" over "biculturism." (Bilingual Research Study,

Final Report).

The review of research literature in this paper deals with (1) growth and development, (2) language acquisition, (3) program and methodology, and (4) tests and measurements.

GROWTH AND DEVELOPMENT

In the early days of investigating the bilingual child, it was found that the bilingual child tended to be inferior in most variables, for example, intelligence, academic achievement, when compared to the English-speaking child. These discrepancies in favor of the English-speaking child were generally explained in terms of language differences. Any attempt to analyze today the growth and development, a person must of necessity take into consideration the fact that the overwhelming majority of the bilinguals in this country are members of some minority group. Perhaps this factor more than bilingualism or biculturalism accounts for the stunted growth that is apparent among minority group members. This can be explained by the fact that the minority group members as a whole have less accessability to:

1. The economic base of the nation
2. The social life of the American people
3. The educational opportunities of the schools. (Samora)

However, because of the overwhelming interdependency of American society, no social group can live in isolation. Since the Anglo-American culture is predominant in the United States, all minority groups, for purposes of survival, must function to some degree within the Anglo-American socio-cultural milieu. This is forced conformity. (Ulibarri) The majority group has within its domain the power to state certain norms for the minority group and to force them into certain types of behavior according to the pre-set norms. The fact that the minority group member is operating, out of necessity, out of his element - he behaves, most of the time, in an inferior manner. (Marden) At this point the majority group withholds

rewards from the minority group and intensifies the acculturation efforts.

The net result generally tends to be that the minority group members, which in the Southwest are bilingual groups, i. e., the Indians and the Mexican-Americans, are relegated a lower status and are destined to poorer conditions and standards of living than the majority group member. (Samora; Mexican-American Study) This poverty springs the downward spiral of bad education, bad health, less energy, less functionality within the Anglo-American culture and, thus, more destitution. As a result, we find today that the Indian-American and the Mexican-American, which are the target groups, are impoverished, as a whole, and have rather low educational attainment levels.

What does this forced conformity, this characteristic of being poor, do to a group of people? No comprehensive study has been made that could give us substantive answers to these questions as they relate to the Indian and Mexican-American in the Southwest. Little attention has been given to the developmental problems of the poor except, in recent years, through the war on poverty. A scientifically designed investigation to find where the areas of strengths and areas of weaknesses are among the bilingual-bicultural has not been undertaken.

This section on growth and development is divided into: (1) Physical Growth, (2) Mental Growth, (3) Academic Growth, and (4) Socio-Cultural Growth.

Physical Growth - Regarding physical growth, health and sickness, there has been no widespread research that has attempted to assess the physical status of the bicultural minority group member. What little we know about this area has been from studies that have been made of small

groups and projects such as OEO projects, Head Start, and Medicare. The general concensus of these studies has been that the bilingual in no respect is different from any other group in physical stamina and physical health. What has to be considered is the relative social class status of the individual. This becomes a crucial factor in the area of multicultural education since the majority of the bicultural people are minority group members and are characterized by poverty-stricken living conditions. (Mexican-American Study) More recently, the task force for OEO has indicated that there is strong evidence that mental growth is affected and arrested by dietary and nutritional deficiencies during the pregnancy period and, especially, during the first six months of life of the infant. (Lucille Hurley) If these studies are correct in their assessment, it is a frightful consequence that we must face, if poverty is not eradicated from the life of the bilingual-bicultural individual. This means that it is possible to have generation after generation of impoverished, slow learners among the bilingual-bicultural of the Southwest.

Mental Growth - The overwhelming evidence of the research dealing with intellectual growth of the bilingual is that the bilinguals score at much lower levels than the norming group. No research evidence was uncovered where an attempt was made by some form of treatment to increase the intelligence quotient of the bilingual, except one made by Sanchez. (Sanchez) This phenomenon of the bilingual student generally scoring lower than the English-speaking monoglot will be discussed at length in the section dealing with Testing and Measurements.

Regarding the self concept of the individual, the evidence shows that

the bilingual-bicultural individual tends to be more defensive, filled with more anxiety, and is more alienated than the English-Speaking, Anglo-American. (Palomares, Ulibarri) The reason for this syndrome is not necessarily attributed to bilingualism. Although bilingualism may be a contributing factor, it is surmised that the strongest factor is that most bilinguals are minority group members with all the attendent anomolies.

Besides this defensive syndrome, the bilingual-bicultural individuals tend to experience some confusion and frustration as they move from the native cultural setting into the school setting. (Christian) This is directly attributed to the lack of facility in the English language and to differences in the cultural setting, especially the difference in the value systems of both settings. Some of the Spanish-speaking bilinguals feel within themselves the need of improving human relationships, the finding of a job, getting an education, having vocational guidance, and learning more about the customs of this country. This study was done among the Puerto Rican students. Teachers of the Puerto Ricans definitely feel that they need to improve speech, reading, writing, and arithmetic as competencies among their students. (Stambler)

Probably the most damaging thing to the self concept of the bilingual has been the widespread practice in the Southwest of prohibiting Spanish-speaking students to speak their native dialect within the school grounds and within the classroom. This has been done in the name of teaching these children to speak in English and to reinforce their learning of English. The results have been generally that the students soon learn that Spanish is the language of deviancy and that to be a Spanish-speaker is to be, by that very fact, an object of differentiated treatment. (Ulibarri) This coupled with the fact that there is a constant influx of lower class

Mexicans in the Southwestern part of the United States has perpetuated the image of the Mexican being an illiterate, lazy, impoverished individual who is a welfare case on the rest of society or is on the borderline. (Mexican-American Study) In general, this same pattern has existed in the treatment of the Indians by the Bureau of Indian Affairs Schools. There is some evidence that the inclusion of Spanish as a vehicle for teaching both subject matter and cultural factors in a regular school curriculum enhances the development of a positive self-image. (Andersson; San Antonio Study)

Academic Growth - The research literature is in concensus that the bilingual child generally achieves at a lower level and gains at a slower rate than the Anglo-American, English-speaking child in all areas of the curriculum when the instruction is done all in English. When the instruction is done bilingually, there is a definite gain on language acquisition in both languages by the bilingual. In one study, the bilingual students showed less gain in subject matter areas when compared to students who were not participating in the bilingual program, but were significantly higher in language acquisition. (San Antonio Study)

The above findings very definitely apply to the Mexican-Americans. The Indian groups have been studied and have been found to be very deficient in achievement levels. (Anderson) A conclusion that was drawn in one study was that the Indian students who are attending off-reservation public schools did better than the ones that attended in-reservation public schools. The students that attended Bureau of Indian Affairs off-reservation schools generally did better than students who attended in-reservation BIA schools. (Coombs)

Among the reasons given for this lower achievement has been namely language interference. (Rohn) Generally it has been conceded that the bilingual student, because of his lack of proficiency in the English language, understands less of the teaching in the classroom because it is so highly verbalized. Even in the reading program, when the idiomatic expressions have been isolated from the basal readers, it has been found that there is a tremendously significant difference between the lack of understanding of the Navajo and Spanish-speaking children with the assumed level of language competency of the basal readers at the fourth, fifth, and sixth grade levels. (Yandell, Dudding) It has been found that the Spanish-speaking students do better in achievement tests in the areas of computation or memorization, such as arithmetic computation and spelling, than they do in the more verbal subjects, such as the language battery, social studies battery, and even the science battery. (Zintz)

Another factor that has been alluded to in the research are elements not directly evident within the school. (Michael, Caplan & Ruble) These elements have to do with the home and community environment in which the child exists. The educational-linguistic background of the parents has been found to have correlations with the achievement of the children in the school. Generally, the more acculturated the parents are, the better they speak the English language, the higher the child will achieve in school. Generally it is argued that the more acculturated the child is, the better he will be able to achieve in school. These are speculations and are not found in any type of research. However, one study points out that forced acculturation may well have very negative reactions. (Zintz)

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There is a general agreement in the studies that have been concerned with cultural variables as related to school achievement, that cultural conflicts have a direct relationship with the educational retardation of the children. (Bergan) This has been found in the area of science, in the area of learning English analogies, in the area of reading, and in the area of arithmetic. (Hess, Charles, Ikeda, Condie) None of these studies, however, have delineated specifically which are the cultural conflicts that intervene in the learning process. Two studies attribute the cultural norm of conformity and cooperation on the part of Indian children as being the main causative factor of educational retardation on the part of the children. (Zojonc, Havighurst)

Some studies have been made indicating that the lack of teacher awareness regarding the socio-culture of the bilingual has been a contributing factor in the educational retardation of the Mexican-American and the Indian-American. (Ulibarri, Caplan & Ruble) These studies show that, because the teachers and administrators are unaware of socio-cultural differences, the school curriculum tends to be middle-class WASP oriented. Because of this lack of awareness and because of the schools being middle-class oriented, the bilingual child tends to feel out of place in the school socio-culture. These negative attitudes lead to isolation, defensiveness, and anxiety on the part of the bilingual child; all of which definitely have a bearing on his achievement in school. The teachers, being unaware of this chasm between the socio-culture of the school and the socio-cultural backgrounds of the children, inflict further wounds by causing cultural conflict in their teaching approaches and techniques. (Ulibarri, Cordova)

All the testing done in the area of educational gain among the bilingual

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children have attested to the fact that generally bilingual children score between two to three grades behind their English-speaking counterparts. (Montez) All of the studies have tried to explain the lack of educational gain among tne bilingual in the terms described above, such as lack of experiential background, factors of acculturation, lack of teacher awareness of socio-cultural differences, the attitude of the children, and the culture conflict. No study was found which attempts to measure the reliability and validity of achievement tests on the market today when applied to bilingual-bicultural children, especially the children who come from impoverished areas.

Socio-Culture Growth - The study of acculturation, as such, was not undertaken by this study because the studies on acculturation that have been made were not directly related to bilingual education. Nonetheless, it should be understood that acculturation is a factor that must be considered and included in the bilingual-bicultural program. Acculturation is a necessary process for all minority group members. Acculturation, because it was often mistaken for assimilation and amalgamation, has been viewed as the destruction of any minority culture. Viewed from a bicultural perspective, it becomes a harmonious and controlled interaction between two cultures. (Christian) The acculturation process directly affects the personality. (Bossard) Forced acculturation can cause conflicts, unacceptable reactions, and increased resistance. (Zintz) Minority groups often combine to preserve traditions and to resist forced change. (Burma) This combination extends beyond the family and the community into education.

There are several accompanying phenomena which affect the personality

of the individual who is involved in the process of acculturation. In one of the first studies of acculturation, the process is described in terms of diffusion, assimilation, acceptance, adaptation, and reaction. (Herskovitz)

Diffusion is the aspect of cultural change which includes the transmission of techniques, attitudes, and concepts from one cultural group to another. This change can be a two-way process, however. The dominant culture usually undergoes less change, with more selectivity than the minority group culture. Assimilation is used to designate the process by which culture achieves syntheses. In other words, when a value has been assimilated, it becomes a functional part of the belief system. It is taught through the culture's own process and it is enforced by the mechanism of social control. Acceptance occurs when the members of the minority culture lose most of the values and practices of the old culture and acquire the inner values and behavioral patterns of the culture with which the group has come into contact. Adaptation is a condition where original and foreign cultural traits are combined to produce a smoothly functional cultural whole. It is achieved with modification of the patterns of the two cultures. There may be the retention of a series of conflicting attitudes and values which are reconciled in everyday life as special occasions arise. Reactions occurs because of oppression or because of unforseen consequences of acceptance of foreign culture traits. Contra-acculturation movements develop and the reaction may maintain its psychological force: (1) as a compensation for the imposed or assumed inferiority, or (2) through the prestige which a return to the pre-acculturative conditions may bring to the group participating in such a movement.

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Acculturation is more selective for the adult individual than for the child. (Mead) The adult can select from the culture that has resemblances to the familiar and add to his store of new learnings as they are needed. In general, the adult can retain his identity in his own ethnic and cultural cluster, but to the child who is still in the process of learning the social roles, the decision creates much more stress. He is caught between the culture of his parents and that of the school, as well as that of the rest of the community. Thus, he is forever being forced to choose between conflicting sets of values, being rewarded or punished alternately or simultaneously by the conflicting culture systems. Cultural disruption is a common result of contact by one cultural group with another. Sometimes acculturation encourages positive changes in one or both cultural groups. The most common patterns have been one of cultural groups. The most common patterns have been one of cultural disruption, however, for the minority culture. (Ulibarri)

The problems of acculturation of the Mexican-Americans and the Indian-Americans have been extensively studied and the conclusions arrived at is that much personal disorganization takes place because of the disfunctions between the two socio-cultural systems. (Ulibarri) For example, the question of time orientation is perhaps the most widely known, where the Anglo-American wants the individual to be oriented toward the future while the Mexican-American and the Indian-American prefer to be oriented toward the present. (Spang)

Some of the conclusions that have been arrived at through the research on acculturation have been the following:

1. Indians have tended to resist acculturation more than any

other ethnic group. (Spang)

2. The Spanish-Americans can be found on a continuum of acculturation from very little acculturation to very high acculturation. (Shasteen)
3. Acculturation of the Mexican-American takes the form of a broken profile where they are very acculturated in some areas and relatively unacculturated in others. (Shasteen)
4. Acculturation is greater among the Mexican-Americans in the middle class ranks than in the lower classes. (Shasteen, Ulibarri)
5. Acculturation has little or no correlation to school achievement. (Cordova, Simirenko)
6. Acculturation has significant correlation to alienation when family and powerlessness are related. (Cordova)
7. Attempts at preserving the cultural entity have been undertaken by power movements.
8. The ultimate goal of acculturation can be biculturalism. (Ulibarri, Bossard)
9. Ethnic factors have decidedly biased the judgment of the adolescent toward community attitudes. (Peck)
10. Most studies have concluded that the problems affecting the bilingual-bicultural groups of the Southwest can be best solved by complete acculturation.
11. There is a dissident view, however, that biculturalism is the ultimate goal. (Knowlton)
12. The amount of formal education alters the perception of the individual toward American society. The more formal education

the individuals have, the more positive the attitudes and orientations tend to be toward the American culture. Barbosa-DaSilva).

13. Also, the more acculturated the parents are, the more they want their children to join the mainstream of society. (Bernardoni)
14. Lower class Mexicans and Mexican-Americans exhibit ethnocentric tendencies. (Ulibarri)
15. A profound knowledge or no knowledge of the Anglo culture yielded the least cultural prejudices in a study where the attitudes of bilingual male students toward the Anglo ethnic group were measured. (Johnson)
16. Mobility of the Indian population, impeded by illiteracy, language difficulties, and lack of technical skills seem to be the reasons for the failure to acculturate the Indian. (Adams)

LANGUAGE ACQUISITION AND LEARNING

Theoretical Linguistics - The task of theoretical linguistics is to explain the nature of language as a system. All activities of linguists will be based on their theory of language. The last decade has been marked by an increasing formalization of linguistic theory, as well as by a major change in the nature of the theory. (Langacker, Shane)

The Nature of Language - Language is an abstract system of rules used by human beings for communication. It is not writing alone, for millions of illiterates use it; it is not speech alone, for people who are deaf and dumb use it.

Recent linguistic work concentrates on the notion that language is creative, that is, that the most important property of language is that its users can make up and understand utterances that they have never come across before. To explain this, it is necessary to propose an elaborate system of abstract rules that any speaker of a language develops as he acquires the language. These rules are believed to fall into three components: semantic, syntactic, and phonological. (Chomsky)

Language Acquisition - The acquisition of the rules depend on two things: a human learner, and exposure to a language. Every normal human being acquires a language, and he acquires the language he is exposed to. The ability to acquire a language is innate: the actual language learning depends on environment. (Lennenberg)

Language Description - All human languages have structure. There are universal properties (for language is innate), but individual differences. A language may be described, and language description is a central task of

the linguist. The job is an enormous one. No one has yet succeeded in describing any human language with anything remotely approaching completeness, but this has not prevented children learning those languages. A language description is called a grammar. (Chomsky, Thomas)

Semantics - The semantic component of a grammar is that part concerned with explaining how sentences have meaning. The meaning of a sentence is made up of the naming of its parts (words, phrases, etc.), and the way in which they are combined. Studies of the meaning systems of various languages show that while the processes are similar, the way in which a given language labels the reality around it differs from the way in which another language does so. For example, in English we use the word "head" when Spanish would use:

cabeza (head of a person)
cabecera (head of a bed)
cara ("heads" on a coin)
cabeza del fosforo (head of a match)
director (head of an organization)

Syntax - Syntax is the central component of a grammar. It relates the meaning (content) to the external form (expression). There are a number of basic relationships common to all languages. In all languages it is possible to point out the relationship of function. One function is subject of a sentence. A second relationship is transformation, for example, the relation between an active and passive sentence. A third relationship is agreement: the relationship between the English words this, these and the noun that follows, such as this book, or these books.

Syntax is represented in the surface level by a number of structural devices: function words (a, the, to, etc.); word endings (like, liked, liking, etc.); word order (John likes Jill, Jill likes John); and changes

in intonation and punctuation (You like her. You like her?). There are more basic processes involved, including ordering, substitution, deletion, and expansion. (Jacobs, Langacker, Thomas)

Phonology - The third component of the grammar is the phonology, or the sound system. In earlier work in linguistics, the task of phonology was conceived as discovering and listing the significant units of the system, called phonemes. In current work, emphasis is being placed on the establishment of rules, going from the underlying representation of sentences to their surface phonetic shape. (Stockwell)

Contrastive Linguistics - The comparison of descriptive statements about two languages is helpful in giving some explanation of mistakes that speakers of one language make when learning the second, or in suggesting tactics that might be tried in presenting problem areas. (Stockwell)

Psycholinguistics - Psycholinguistics is concerned with the psychology of language. Two areas of special relevance to linguistics are studies of language acquisition and studies of language and cognition. (Saporta)

Psycholinguistic Studies of Language Acquisition - Recent studies of how children acquire their first language have provided empirical support for the hypothesis that it is a matter of developing rules, similar to those referred to above, rather than forming "habits" or "generalizing." As these studies are extended to different cultures and languages, it will be possible to test assumptions about the understanding of the process. The same methods applied to the acquisition of second languages will be of extreme importance to language pedagogy. (Lennenberg)

Language and Cognition - The relation between language and cognition, that is, between the system the speakers of a language use for labeling

their perceptions and the way in which they understand the outside world, is a problem widely debated. Comparison of two languages makes clear the differences of the ways in which they classify the outside world: a widely quoted example is the difference in color-name systems that are to be found. No empirical evidence has been compiled to support the hypothesis that this difference in language leads to any basic differences in cognitive function or cognitive ability. (Lennenberg)

Socio-Linguistics - Socio-linguistics is a new field which in the last decade or so has started to throw some important light on the relation between language and society. (Shuy)

Multilingual Societies - Studies have shown the complexities possible in societies in which more than one language exist. Each of the languages concerned will have a different number of speaker, a different status, a different function, but these three will not necessarily be related. In Quebec, for instance, although the majority of the people speak French, and French is used for public cultural (newspapers, education, religion) as well as private (home, family) function, English has been the status language. (Bright, Fishman, Jacobs, Lieberson)

Multilingual Individuals - An individual's language use is very complex. In a multilingual society, it is not unusual to find a man who speaks language "A" with his parents, language "B" with his wife and children, language "C" at work, and language "D" in his dealings with the government. In each of his roles, he chooses cultural and other attitudes that go along with the language. (Bright, Fishman, Jacobs, Lieberson)

PROGRAMS AND METHODOLOGY

Bilingual education theory, scant as it is, has considered cultural factors in the learning process of the bilingual student. For example, low self-image, lack of willingness and ability to compete are some of the factors that have been emphasized in setting up objectives for bilingual education. Bilingual education has been stated in terms of emphasizing approaches which minimize competition and emphasize bicultural guidance. Still another objective emphasized is that of developing a better self-image through more cultural awareness on the part of the bilingual student. However, most of the theory has yet to be implemented. In general the materials that are being used in the bilingual programs tend to be translations of the English materials and the methodology does not differ significantly from the methodology used in the monolingual regular program of the school.

As far as we have been able to assess, few groups of teachers have received specialized training for bilingual education. Much of what passes for specialized training actually is more methodology of the type given in the average preparation in teacher training programs. Some of the specialization that is given the prospective bilingual education teachers tends to run along the lines of sensitizing the teachers in the area of socio-cultural factors. However, real innovation from the traditional trends of the regular program has not been observed.

One possible exception would be the specialized training that teachers have received in the area of teaching English as a second language. These institutes have been prevalent in the past five years. However, it must be

emphasized that teaching English as a second language is not bilingual education. TESOL is not a curriculum. TESOL is only a means of getting the bilingual child functioning in the English language. TESOL has specialized methodology and a fast-growing body of theory behind it. Some of it definitely is applicable to the bilingual education program. Certainly, for example, the audio-lingual techniques of TESOL are applicable to the teaching of Spanish as a second language as well as to the teaching of any other second language.

Very few bilingual programs are in existence today that are an integral part of the curriculum. Most of the literature reviewed indicated that bilingual education tended to be at the periphery of the curriculum. There were some specialized programs reviewed but these programs tended to be specialized projects and not a part of the regular curriculum. Among the specialized projects in the area of bilingual education were:

> A science project designed to foster bilingualism, forestall anticipated difficulties, and provide motivation, as well as providing for the course requirements in this particular school. Two seventh grade classes of similar age, background and abilities were given the same program in all respects except three: The experimental group received their instruction in Spanish and were given an additional course in the Spanish language. The two groups were measured for progress in Spanish, science, English, and student attitudes. The results indicated an improvement in Spanish and science by those who received the instruction in Spanish. (Loretan)

Another project was an experiment attempting to teach two languages in two culturally distinctive contexts to find out if separate cultural learning enhances the learner's ability to use one language and then the other. The results were that if the bilingual has learned the two languages in culturally distinct contexts, the differences in meaning when translated from one language to another are increased. (Lambert)

A two-year experimental program was conducted to develop bilingual readiness in kindergarten and first grade. The group was composed of Negro, Spanish-speaking and "other children." When several factors were held constant, the Spanish-speaking children gained more self-confidence and cultural awareness. There was also greater acceptance by the children and their parents of second language learning. (Finocchiaro)

An experiment carried on with Guamanian first graders attempted to find out if the postponement of formal reading in favor of an oral reading-readiness approach resulted in higher gains when considered over a four-year period. The results were that at the end of the first year the group excelled in ability to speak English. At the end of three years all groups were equal in their ability to comprehend oral English. At the end of the four years, the control group showed a small but significant lead in the ability to read as measured by the California Reading Test. The results were inconclusive. (Cooper)

The Spanish language and the Mexican and Spanish culture have been taught in this particular system for a long period of time. The emphasis has been on oral development but some reading and writing is done in the fourth and fifth grades. The teaching units are designed to motivate and create interest. They include such activities as Home-Community Life, Transportation, Communication, School Activities, Health, and Safety. (Rivera)

Much of the attempts at specializing for curriculum for the teaching of bilingual students has centered around the area of language development and reading. One of the experiments attempted to assess the effect of teaching Spanish-speaking children to read in Spanish when they were retarded in the reading of English. The two groups received equivalent instruction in English, but the experimental group was also taught directly to read in Spanish. There was no reliable evidence of interference between the two languages at either school. The results were that greater reading ability in Spanish resulted more from direct instruction in reading Spanish than unplanned transfer from English alone. Tentatively also, it was concluded that there was some value in planned transfer from learning in Spanish to English in the improvement in reading abilities of Spanish-English bilinguals. (Kaufman)

A program to develop oral language skills to reinforce traditional cultural values of the Spanish-American produced reassuring results as of the interim report of 1966. The recommendation made

then was that there should be an emphasis on parent participation, individualized instruction, self-instruction and cultural awareness on the part of the children in order to attain satisfactory academic progress and to develop their sense of self-identity and self-esteem. (Amsden)

There have been several other studies made in the area of reading which have included linguistics approaches to the teaching of reading, (Condie); studies in the area of science, (Charles); studies in the area of arithmetic, (Ikeda). Some have been in the area of music, (Blickenstaff, Feuerlicht). Another study indicates that the extensive use of field trips to build experiential background and knowledge results in strong student visual acuity and auditory perception. Also in this same study, language pattern facilities seem to have improved and the children appeared to have developed a sense of curiosity and definitely were more expressive in the oral language. (Compensatory Education Project)

Several TESOL materials have been developed in program form. For example, English 900, American English Series, The Miami Linguistic Readers, and several supplementary materials in the teaching of second language. (Rojas)

Relatively little bicultural material has been developed with the exception of an innovative program at the Rough Rock School Project. In this project, Navajo is used right along with English in the teaching of Navajo cultural traditions and value systems. (Rough Rock)

There have been several departures in the traditional guidance programs for bilingual students. A project called, "Student Motivation Program,"

in the Denver schools has been organized for the explicit purpose of attempting to motivate the students into finishing their high school and enrolling at the university level. Several types of activities are carried on, some of them social in nature, some of them in the area of public relations, and others in community action endeavors. The result is that the rapport has been developing whereby the students, besides auto-motivating themselves, are also talking out their problems with one another and with their teacher-sponsors. Relatively good results are occurring in that the students are beginning to be able to see the nature of their problems and attempting to find solutions to them.

Another project has hired a Mexican who has been naturalized and serves in the capacity of group counselor. As the students coming in from Mexico enroll in this particular school, they are given a series of informal lectures comparing the value systems of the American society with that of the Mexican society, given many "dos and don'ts" regarding their school behavior, and their behavior in the community as well. At the same time they have the opportunity of asking questions and discussing their personal problems. Along with this, they are introduced to an intensive English-as-a-second-language program, and as soon as possible are placed into the regular classrooms. All along, they come back from the classroom into the second language, teaching as their needs demand, as well as into informal consultation with the group guidance counselor. The result has been that the dropout rates have decreased significantly in the past few years.

The following section contains a description of the on-going programs that were either visited or literature was received from them.

TESTS AND MEASUREMENTS

Testing bilinguals has received much attention from researchers for a long period of time. Much of the research has been comparative studies between bilinguals and monoglots. The testing of bilinguals can be divided into three periods. During the first period when the theory of racial psychology was rampant, the general conclusions were that bilingual-bicultural individuals were inferior in intelligence testing to monoglot Caucasians. In the second period when there was considerable doubt about the validity of the testing instruments when applied to bilingual-biculturals, the thrust was to develop cultural-free tests, e.g., Davis-Eells Games. The testing results did not improve considerably and this led to the third period where the thrust has been the development of culture-fair tests and the development of local norms instead of relying on the standards of the norming group.

The literature is in general agreement that when intelligence tests are applied to bilingual groups, the scores obtained are much lower (about one standard deviation) than the scores of the norming group. It has been found that when non-language or performance types of tests are administered, the results are more favorable. (Darcy, Bloom, Eells, Havighurst)

These findings have led to the conclusion that the language deficit and/or language barrier is the main causative factor of the low scores of bilinguals in intelligence tests. (Holland, Henderson). There is some evidence that points to the possibility that other variables may be amiss. When a group of Spanish-speaking students were administered the Stanford-Binet both in English and in Spanish, the result was that the

sample scored higher in the English version than in the Spanish, although the scores in the English version were about one standard deviation below the norms. (Keston and Jimenez)

Results indicating test discrimination against lower social classes were obtained by Eells and others in their assessment of the most widely used tests in the Chicago schools when low and high socio-economic groups were compared. (Eells) When the Goodenough Draw-a-Man Test was applied to a group of "advantaged" and to a group of "disadvantaged," the results were significant in favor of the advantaged. (Hanson) Zintz and others concluded that besides the language and experience barrier, there was a culture barrier as well that could not be overcome by the bicultural child. (Zintz) When socio-economic class and age are held constant, the results tend to be that the bilingual shows superior intelligence, greater mental flexibility, superiority in abstract concept formation, and a more diversified set of mental abilities than the monolingual subjects. (The Intelligent Bilingual)

Achievement Tests Nonetheless, intelligence test scores continue to be the best predictors of school success. High correlations are still being obtained when intelligence scores are compared to achievement scores. (Peters, Cooper) But since the results in general in the area of achievement testing have been that the bilingual child scores significantly lower than the English child, (Floyd, Zintz) the phenomenon can be readily understood. One must also remember the historical origin of intelligence testing when Binet established the validity for his scales with school achievement. Somehow or another through validation of instruments with other previously established instruments, the vicious circle of the intel-

ligence instrument being validated with school achievement and then becoming the best predictor of school success continues to plague us. At the same time the high verbal content of the tests must be taken into consideration, which is the same in the area of school achievement. Nonetheless, when the bilingual and monolingual are matched by grade level and social class, the results tend to be that the significant difference disappears in most areas of achievement. (Cline) The type of background, whether rich in socio-cultural experiences (rich in terms of compatibility in terms of the demands of the test) or impoverished in those same terms seem to be a very significant factor in the area of school achievement and in the area of scores obtained in achievement and intelligence tests.

At present there is definite conviction that application of the national norms of any type of test to Indian-speaking or Spanish-speaking youngsters gives spurious negative results. Nonetheless, worthwhile use of test results have been found through the development of local norms. Taking into consideration the language barrier, the experience barrier, and the cultural barrier, intensive extrapolation has to be made in the establishment of local norms.

NEW DIRECTIONS

From the above summary it can be seen that no research conclusions for culturally pluralistic education can be drawn. Rather, we must face the fact that culturally pluralistic education does not exist in the United States nor in the Southwest. We have been teaching in culturally pluralistic situations, especially in the Southwest, but have been using middle class curricula with middle class teaching approaches and motivational structures, assuming that all children, regardless of background, have the same functionality and readiness for learning as middle class WASP children.

What little we know about education of non-middle class, non English-speaking children generally is through measurements of these types in typical middle-class biased schools. We know that the typical program is not working for Indian, Mexican-American, Black, and lower-class Anglo children - as evidenced by the high dropout rates and low achievement levels. But we do not know what kind of program (s) will work with these children.

Only sporadic attempts at program development have been undertaken, for example, TESL, OLP, Headstart, and Bilingual Education in the lower grades. No attempt has been made to develop a total program for minority group children. Rather, only patch-quilt approaches have been the history of "improving" the educational opportunities for the Mexican-American and the Indian as well as the Black. Millions of dollars are misspent annually in "education research" - some of which is for "culturally" different children and/or "bilingual" children. The right questions are not being asked. There is fear in total innovation, and therefore

"research" has been one of "amelioration." The preoccupation has been how we can better fit the culturally different into the program rather than how we can better fit the program to the individual.

It would be expeditious that we forget what we have done in the past - we have done little and the results have been very negative in the education of multicultural children. We need a bold new start. We need basic research at all levels, and in an organized manner. Most of the previous research regarding Mexican-Americans and Indians is by now dated and not applicable to education. Another large section must be discounted because the social conditions at the time were quite different. For example, transportation and communication systems are strong intervening factors in the lives of all children. The disappearance of the "rural" conditions even in the farm environment is another. Wider acceptance of scientific medical care is another factor that has strong implications for the learning potentials of the children regardless of culture and language background.

Thus I would recommend the following areas for basic research.

1. Life style studies:

These studies should hold (1) type of economic base, (2) resulting class stratification, and (3) type of environment constant. An effort should be make to ascertain whether the "value system" of the individual is a function of social class, culture, or both. From these studies experimental and applied research could follow in the following areas:

a. Motivational structure for the classroom.

b. Development of new programs to fit the life style of the individual (s).

c. Development of techniques and materials for instruction of "multicultural" children.

2. Socio-psychological studies:

These studies would primarily be concerned with personality development. What is the impact of life space on the personality type that is developed when one holds constant (1) geographical space, (2) artifacts at the disposal of the individual and (3) type of personal relationships? These studies cut across cultures and, if enough factors are found in common, then approaches to adjustment along the rural-urban, agrarian-industrial or other continuums can be taught and implemented by social agencies including schools. Only with basic studies such as these can the myriad of problems clustered around the process of "acculturation" be understood and tackled.

Alienation is another problem area that is not well understood and therefore little can be done about in the school program. What constitutes a "positive" self image for children of different backgrounds is not well known. How can we develop a program "to develop a better self image" if we do not know what it is? Socio-psychological type of studies can afford the base knowledge that is needed for developing programs related to these problems.

3. Educational studies:

The purpose of the studies should basically be to "pilot" programs and approaches based on the above research. A total program approach is needed. We know that the present programs are not working for the minority group children. To do more patchwork research and development within

the framework of the present program is to waste money.

A systems approach to education is recommended. Starting with the finished product, one defines the process by which the finished product is to be developed which in turn defines the resources that are needed. Evaluation procedures to the system and to the product must be built-in as part of the program. In short, all the scientific knowledge of organizational theory can be applied to educational programming. If we have this knowledge at our disposal, why fool around with the hit-and-miss approaches of the past? Education is a social process which can be directed very easily along scientific lines.

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